

REMARKS:

Claims 1-7, 9-16, 18-25, and 27-30 are currently pending in the subject Application.

Claims 8, 17, and 26 have been previously canceled without *prejudice*.

Claims 1-7, 9-16, 18-25, and 27-30 stand rejected under 35 U.S.C. § 112, first and second paragraphs.

Claims 1-7, 9-16, 18-25, and 27 stand rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,219,649 to Jameson ("*Jameson*") in view of U.S. Patent Publication No. 20020049759 to Christensen ("*Christensen*").

Claims 28-30 stand rejected under 35 U.S.C. § 103(a) over *Jameson* in view of *Christensen* (U.S. Patent Application Publication No.: 20020049759) and in further view of *Supply Chain Management: Strategy, Planning, and Operation*, Prentice Hall, October 2000, by *Chopra et al.* ("*Chopra*").

The Applicants respectfully submit that all of the Applicants arguments and amendments are without *prejudice* or *disclaimer*. In addition, the Applicants have merely discussed example distinctions from the cited prior art. Other distinctions may exist, and as such, the Applicants reserve the right to discuss these additional distinctions in a future Response or on Appeal, if appropriate. The Applicants further respectfully submit that by not responding to additional statements made by the Examiner, the Applicants do not acquiesce to the Examiner's additional statements. The example distinctions discussed by the Applicants are considered sufficient to overcome the Examiner's rejections. In addition, the Applicants reserve the right to pursue broader claims in this Application or through a continuation patent application. No new matter has been added.

REJECTION UNDER 35 U.S.C. § 112 FIRST AND SECOND PARAGRAPHS:

The Applicants respectfully submit that the Examiner's remaining rejections of Claims 1-7, 9-16, 18-25 and 27-30 under 35 U.S.C. §112 First and Second Paragraphs

have been rendered moot in light of the foregoing amendments. The Applicants further respectfully submit that the foregoing amendments are not necessitated by any prior art and are unrelated to the patentability of the present invention.

REJECTION UNDER 35 U.S.C. § 103(a):

Claims 1-7, 9-16, 18-25, and 27-30 stand rejected under 35 U.S.C. § 103(a) over *Jameson* in view of *Christensen*. Claims 28-30 stand rejected under 35 U.S.C. § 103(a) over *Jameson* in view of *Christensen*, in further view of *Chopra*.

The Applicants respectfully submit that *Jameson* and *Christensen*, individually or in combination fail to disclose, teach, or suggest each and every element of Claims 1-7, 9-16, 18-25, and 27-30. The Applicants further respectfully submit that currently amended independent Claims 1, 9, 10, 18, 19, and 27 contain unique and novel limitations that are not disclosed, suggested, or even hinted at in *Jameson* or *Christensen*. Thus, the Applicants respectfully traverse the Examiner's obviousness rejection of Claims 1-7, 9-16, 18-25, and 27-30 under 35 U.S.C. § 103(a) over *Jameson* in view of *Christensen*. In addition, the Applicants respectfully submit that *Jameson*, *Christensen* and *Chopra*, individually or in combination, likewise fail to disclose, teach, or suggest each and every element of Claims 28-30.

The Applicants Respectfully Traverse the Examiner's Finding of Official Notice

The Examiner "maintains the position that no Official Notice has been taken regarding 'a method for solving a supply chain problem.'" (8 January 2008 Final Office Action, Page 3). The Examiner likewise asserts that "no taking of Official Notice can be found [... therefore,] Examiner submits that this argument is moot as no Official Notice has been taken." (8 January 2008 Final Office Action, Page 3).

Nevertheless, the Examiner directly contradicts the foregoing assertion by conclusorily asserting, without citing any evidence or authority, that "[t]hus, ***solving a resource planning problem is the same as solving a supply chain planning***

problem.” (8 January 2008 Final Office Action, Page 3). In addition, the Examiner conclusorily asserts that “a resource allocation method **is** a supply chain planning problem.” (8 January 2008 Final Office Action, Page 5, Lines 6-7).

It is clear from the Office Action that the Examiner has not provided any evidence, arguments or reasoning tending to substantiate the assertion that “a resource allocation method **is** a supply chain planning problem.” In the absence of such evidence, arguments or reasoning, the Examiner’s assertion is just that – ***an assertion unsupported by facts or authority***. Accordingly, ***the foregoing assertion necessarily constitutes a taking of Official Notice by the Examiner, unsupported as the assertion is by documentary evidence***.

It is well-settled that only “in limited circumstances,” is it “appropriate for an examiner to take official notice of facts not in the record or to rely on common knowledge in making a rejection.” (see MPEP § 2144.03). Moreover, ***“official notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known.”*** The Examiner’s assertion that “a resource allocation method **is** a supply chain planning problem” is clearly incapable of “instant and unquestionable demonstration as being well-known.” (8 January 2008 Final Office Action, Page 5, Lines 6-7). As noted by the court in *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970), the notice of facts beyond the record which may be taken by the examiner must be ‘*capable of such instant and unquestionable demonstration as to defy the dispute*’ (citing *In re Knapp Monarch Co.*, 296 F.2d 230, 132 U.S.P.Q. 6 (C.C.P.A. 1961)).” (MPEP § 2144.03(A)).

In addition, “the applicant should be presented with the explicit basis on which the examiner regards the matter as subject to official notice and be allowed to challenge the assertion in the next reply after the Office action in which the common knowledge statement was made.” (MPEP § 2144.03(B)). (Emphasis Added). ***In the present matter, the Examiner has set forth no basis, let alone an “explicit basis” to support the assertion*** that “a resource allocation method **is** a supply chain planning problem.” (8

January 2008 Final Office Action, Page 5, Lines 6-7). The above Officially-Noticed Examiner's assertion ***does not adequately address the issue that this statement is considered to be common knowledge or well-known in the art***, in fact, ***the assertion merely presupposes what it concludes***. The Applicants once again respectfully submit that the ***Office Action provides no documentary evidence to support the Official Notice taken by the Examiner***, yet the asserted "facts" are not capable of "instant and unquestionable" demonstration as being well-known.

Accordingly, the Applicants hereby respectfully request the Examiner to produce evidence or authority for the Examiner's assertions that "a resource allocation method is a supply chain planning problem" and that "thus, solving a resource planning problem is the same as solving a supply chain planning problem." (8 January 2008 Final Office Action, Page 5, Lines 6-7). The Applicants further submit that the Applicants have adequately traversed the Examiner's assertion of Official Notice and direct the Examiner's attention to the pertinent text of the MPEP, which states:

If applicant adequately traverses the examiner's assertion of official notice, ***the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained***. See 37 CFR 1.104(c)(2). See also *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697 ("[T]he Board [or examiner] ***must point to some concrete evidence in the record in support of these findings***" to satisfy the substantial evidence test). If the examiner is relying on personal knowledge to support the finding of what is known in the art, the examiner must provide an affidavit or declaration setting forth specific factual statements and explanation to support the finding. See 37 CFR 1.104(d)(2). (MPEP § 2144.03(C)).

Thus, if the Examiner continues to maintain the rejection of Claims 1-7, 9-16, 18-25, and 27-30 based on the Examiner's Official Notice, the Applicants respectfully request that the Examiner provide documentary evidence as necessitated by MPEP § 2144.03(C). Furthermore, if the Examiner is relying on personal knowledge the Applicants further request that the Examiner provide an Affidavit or Declaration setting forth specific factual statements and explanation to support the finding as further necessitated by MPEP § 2144.03(C).

The Examiner's Own Assertions Make Clear that a Resource Allocation Method Is *Not* a Supply Chain Planning Problem

The Examiner asserts on Page 5 of the 8 January 2008 Final Office Action that “resource allocation is a **part** of supply chain management.” (Emphasis added). From this acknowledgment, it is clear that the Examiner interpretation of a “resource allocation” is but **one component** of “supply chain management” and is not equivalent in and of itself. Accordingly, since the Examiner has clearly acknowledged that a “resource allocation” is a **mere piece** (“**part**”) of “supply chain management” the Examiner’s assertion that “a resource allocation method **is** a supply chain planning problem” cannot be logically substantiated. Put another way, the Examiner’s acknowledgement that “resource allocation is a **part** of supply chain management” clearly undermines the Examiner’s taking of Official Notice that “a resource allocation method **is** a supply chain planning problem.” After all, if “resource allocation” is but a **part** of “supply chain management,” as the Examiner acknowledges, then “resource allocation” itself cannot be a mere component **part** of “supply chain management” and simultaneously equivalent to the whole.

Accordingly, since by the Examiner’s own acknowledgment that *Jameson* in view of *Christensen* discloses but a **part** of Applicants claimed invention, and not **each and every limitation** thereof, a finding of obviousness cannot be properly supported. Specifically, Applicants respectfully submit that, in an obviousness situation, the **prior art must disclose each and every element of the claimed invention**. (See *In re Lee*, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002)). (Emphasis Added). Likewise, conclusory statements regarding common knowledge and common sense are insufficient to support a finding of obviousness. *Id.* at 1434-35. Specifically, the Applicants respectfully submit that each and every element of Applicants claimed invention is **not** present in the prior art, either individually or in combination.

The Proposed *Jameson-Christensen-Official-Notice* Combination Fails to Disclose, Teach, or Suggest Various Limitations Recited in the Applicants Claims

For example, with respect to amended independent Claim 1, this claim recites:

A computer-implemented method for solving a supply chain planning problem, comprising:

decompositioning the supply chain planning problem into a plurality of independent sub-problems;

providing ***a plurality of distributed database partitions***, each partition of said plurality of distributed database partitions associated with a respective independent sub-problem of said supply chain planning problem;

operating ***a plurality of processors***, each processor of said plurality of processors associated with a respective partition of said plurality of distributed database partitions;

forming a plurality of distributed sub-problem partitions, each of said distributed sub-problem partitions including a plurality of related items and associated with a respective independent sub-problem of said supply chain planning problem;

loading data into a plurality of distributed database partitions, said data associated with said plurality of related items, and each of said distributed database partitions associated with a respective one of each of said distributed sub-problem partitions; and

solving each of said plurality of said independent sub-problems by separate processes operating in parallel in said database. (Emphasis Added).

In addition, *Jameson, Christensen*, and the Examiner's Official Notice, individually or in combination, fails to disclose each and every limitation of amended independent Claims 9, 10, 18, 19, and 27.

As noted above, the Examiner acknowledges that Jameson discloses only a "part" of the Applicants claimed invention, and not each and every limitation thereof. Therefore, as noted above, a finding of obviousness cannot be properly supported. Moreover, the Applicants respectfully submit that *Jameson* fails to disclose, teach, or suggest amended independent Claim 1 limitations regarding ***"decompositioning the supply chain planning problem into a plurality of independent sub-problems"***. Rather *Jameson* discloses a method of allocating *resources* in an uncertain environment. (Abstract and Column 1, Lines 10-15). Particularly, the Examiner apparently equates ***"decompositioning the supply chain planning problem into a plurality of independent sub-problems,"*** recited in amended independent Claim 1, with the process of dividing ***"the allocation problem"*** into ***"simpler sub-problems"*** disclosed in *Jameson*.

(8 January 2008 Office Action, Page 5). However, the Applicants respectfully direct the Examiner's attention to the cited portion of *Jameson*:

Several strategies are used in tandem to cope with the inherent NP-hardness of stochastic programming: clustering, line searching, statistical sampling, and unbiased approximation. Clustering is used to divide the allocation problem into simpler sub-problems, for which determining optimal allocations is computationally simpler and faster. Optimal allocations for sub-problems are used to define spaces for line-searches; line searches are used for optimizing allocations over ever-larger sub-problems.

(Column 7, Lines 45-54). As can be plainly seen from the cited portion of *Jameson*, the process for dividing “the allocation problem into simpler sub-problems” disclosed in *Jameson* does not include dividing **a large-scale supply chain planning problem**, as recited in amended independent Claim 1.

Moreover, as shown above, there is simply no equivalence between an “allocation problem” disclosed in *Jameson* and the “supply chain planning problem”, as recited in amended independent Claim 1. Accordingly, ***Jameson fails to teach, suggest, or even hint at a large-scale supply chain planning problem, or even any supply chain planning problem in the first place.*** Once again, for the reasons set forth at length above, there is simply no equivalence between an “allocation problem” disclosed in *Jameson* and the “supply chain planning problem”, as recited in amended independent Claim 1. In addition to the foregoing, amended independent Claim 1 recites dividing ***large-scale supply chain planning problems into a plurality of independent sub-problems and to identify clusters and create partitions made up of the clusters.*** Thus, the Applicants respectfully submit that the equations forming the foundation of the Examiner's comparison between *Jameson* and amended independent Claim 1 cannot be made. The Applicants further respectfully submit that these distinctions alone are sufficient to patentably distinguish amended independent Claim 1 from *Jameson* in view of *Christensen*.

The Applicants further respectfully **submit that Jameson fails to disclose, teach, or suggest amended independent Claim 1 limitations regarding a “large scale supply chain planning” but rather the separate problem of “resource allocation.”** As mentioned above, the Examiner acknowledges the lack of equivalence between “resource allocation” and supply chain planning,” noting at least that resource allocation is only a “**part**” of supply chain planning. Thus, the Applicants respectfully submit that the equations forming the foundation of the Examiner’s comparison between *Jameson* and amended independent Claim 1 cannot be made. The Applicants further respectfully submit that these distinctions alone are sufficient to patentably distinguish amended independent Claim 1 from *Jameson*.

In addition to the foregoing, the Examiner asserts that the Applicants independent Claim 1 limitation “**solving each of said plurality of said independent sub-problems by separate processes operating in parallel in said database**” is somehow disclosed in *Jameson*. **This is simply not the case.**

In support of the foregoing assertion, the Examiner directs the Applicants attention to “*Jameson* Column 8, Lines 8-25; where the sub-problems are solved to determine the optimal allocation point.” The Applicants respectfully direct the Examiner’s attention to the cited portion of *Jameson*:

The value of z across both the first and second scenarios is shown by curve 230; stated differently, curve 230 shows the probabilistically-weighted average value of curves 201 and 202. The value of z across the third and fourth scenarios by is shown by curve 241. For both clusters, the optimal individual-scenario allocations are good starting points for finding the optimal cluster allocations. Line-search techniques, to be explained shortly, are used to locate a point 232 as the optimal allocation for cluster 221. For cluster 231, however, the third scenario's optimal allocation (point 213) is the best cluster allocation. Now, the iteration repeats: the two cluster allocations points 232 and 213 are clustered into a larger final cluster. The value of z across the four scenarios is shown by curve 251, and as analogous to using optimized-scenario allocations, the optimal allocations for the individual clusters serve as starting points for finding the overall optimal allocation, point 261

(Column 8, Lines 8-25). As is clearly evident from the foregoing cited passage of *Jameson*, (and, in fact, *Jameson* in its entirety) ***Jameson is completely silent*** as to the independent Claim 1 limitation “solving each of said plurality of said independent sub-problems by separate processes operating in parallel in said database.” The Applicants respectfully submit that there is simply no equation between the “optimal individual-scenario allocations” disclosed in the cited portion of *Jameson* and the Applicants independent Claim 1 limitation “***solving each of said plurality of said independent sub-problems by separate processes operating in parallel in said database.***” In addition, the Applicants respectfully submit that *Jameson and Christensen* are both completely silent as to “solving each of said plurality of said independent sub-problems by separate processes operating in parallel in said database.” In fact, *Jameson* and *Christensen* fail to disclose, teach, or even relate to “separate processes operating in parallel.”

Ultimately, the cited portion of *Jameson* clearly fails to disclose “solving each of said plurality of said independent sub-problems by separate processes operating in parallel in said database.” The Applicants further respectfully submit that the Examiner is using the subject Application as a template to formulate reconstructive hindsight, which constitutes impermissible use of hindsight under 35 U.S.C. § 103(a).

A recent Federal Circuit case makes it crystal clear that, in an obviousness situation, the ***prior art must disclose each and every element of the claimed invention***, and that any motivation to combine or modify the prior art must be based upon a suggestion in the prior art. *In re Lee*, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). (Emphasis Added). Conclusory statements regarding common knowledge and common sense are insufficient to support a finding of obviousness. *Id.* at 1434-35. With respect to the subject Application, the ***Examiner has not adequately supported the selection and combination of Jameson or the Examiner’s Official Notice*** to render obvious the Applicants claimed invention. The Examiner’s conclusory statements that “it would have been obvious, at the time of the invention, for one of ordinary skill in the art to use the *Jameson* resource allocation method for solving supply chain problems” and that “***because resource allocation is part of supply chain management***”, ***does not adequately address the issue of motivation to combine.*** (15 March 2006 Final Office

Action, Page 8). This factual question of motivation is material to patentability, and cannot be resolved on subjective belief and unknown authority. *Id.* It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher." *W.L. Gore v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983). Thus, ***the Office Action fails to provide proper motivation for combining the teachings of Jameson or the Examiner's Official Notice***, either individually or in combination.

A recent Federal Circuit case makes it crystal clear that, in an obviousness situation, the ***prior art must disclose each and every element of the claimed invention, and that any motivation to combine or modify the prior art must be based upon a suggestion in the prior art.*** *In re Lee*, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). (Emphasis Added). Conclusory statements regarding common knowledge and common sense are insufficient to support a finding of obviousness. *Id.* at 1434-35. With respect to the subject Application, the ***Examiner has not adequately supported the selection and combination of Jameson or Fierro to render obvious the Applicants claimed invention.*** The Examiner's conclusory statements that "it would have been obvious at the time of the invention, to one of ordinary skill in the art to incorporate the advantages of sizing the sub-problem partitions as close to equal as possible as taught by *Fierro* to *Jameson's* system" and that "in order to more efficiently solve the sub-problems and ***increase the overall efficiency of the system***, which is the goal of *Jameson*", ***does not adequately address the issue of motivation to combine.*** (15 March 2006 Final Office Action, Page 8). This factual question of motivation is material to patentability, and cannot be resolved on subjective belief and unknown authority. *Id.* It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher." *W.L. Gore v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983). Thus, ***the Office Action fails to provide proper motivation for combining the teachings of Jameson or Fierro***, either individually or in combination.

The Office Action Fails to Properly Establish a *Prima Facie* case of Obviousness According to the UPSTO Examination Guidelines

The Applicants respectfully submit that the Office Action fails to properly establish a *prima facie* case of obviousness of Claims 1-7, 9-16, 18-25, and 27-30 over *Jameson*, *Christensen*, and *Chopra*, either individually or in combination. In particular, the Office Action fails to establish a *prima facie* case of obviousness based on the “Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc.*” (the “Guidelines”).

As reiterated by the Supreme Court in *KSR International Co. v. Teleflex Inc.* (*KSR*), the framework for the objective analysis for determining obviousness under 35 U.S.C. 103 is stated in *Graham v. John Deere Co.* (383 U.S. 1, 148 USPQ 459 (1966)). Obviousness is a question of law based on underlying factual inquiries. These factual inquiries enunciated by the Court are as follows:

- (1) Determining the scope and content of the prior art;
- (2) Ascertaining the differences between the claimed invention and the prior art; and
- (3) Resolving the level of ordinary skill in the pertinent art.

(Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). Objective evidence relevant to the issue of obviousness must be evaluated by Office personnel. (383 U.S. 17–18, 148 USPQ 467 (1966)). As stated by the Supreme Court in *KSR*, “While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.” (*KSR*, 550 U.S. at ___, 82 USPQ2d at 1391).

However, it is important to note that the Guidelines require that Office personnel “**ensure that the written record includes findings of fact** concerning the state of the art and the teachings of the references applied. (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). In addition, the Guidelines remind Office personnel that the “**factual findings made by Office personnel are the necessary underpinnings to establish obviousness.**” (*id.*). Further, “**Office personnel must provide an explanation to support an obviousness rejection** under 35 U.S.C. 103. (*id.*). In fact, “35 U.S.C. 132 requires that the applicant be

notified of the reasons for the rejection of the claim so that he or she can decide how best to proceed” and “clearly setting forth findings of fact and the rationale(s) to support a rejection in an Office action leads to the prompt resolution of issues pertinent to patentability.” (*id.*).

With respect to the subject Application, the Office Action has not shown the ***factual findings necessary to establish obviousness*** or even ***an explanation to support the obviousness rejection*** of Claims 1-7, 9-16, 18-25, and 27-30 based on the proposed combination of *Jameson*, *Christensen*, and *Chopra*, either individually or in combination. The Final Office Action merely states that:

It would have been obvious, at the time of the invention, to one of ordinary skill in the to combine the features of ‘providing a plurality of distributed database partitions, each partition of said plurality of distributed database partitions associated with a respective independent data hunks of said supply chain planning problem,’ ‘operating a plurality of processors in said database, each processor of said plurality of processors associated with a respective partition of said plurality of distributed database partitions,’ ‘forming a plurality of distributed sub-problem partitions, each of said distributed sub-problem partitions including a plurality of related items,’ loading data into a plurality of distributed database partitions, said data associated with said plurality of related items, and each of said distributed database partitions associated with a respective one of each said distributed sub-problem partitions’ taught by *Christensen* to *Jameson* in order to increase the performance of the system, which is a goal of *Christensen*.” (8 January 2008 Final Office Action, Pages 6-7).

The Applicants respectfully disagree and respectfully submit that the Examiner’s conclusory statement is not sufficient to establish the ***factual findings necessary to establish obviousness*** and is not a sufficient ***explanation to support the obviousness rejection*** based on the proposed combination of *Jameson* and *Christensen*.

The Guidelines further provide guidance to Office personnel in “determining the scope and content of the prior art” such as, for example, “Office personnel must first obtain a thorough understanding of the invention disclosed and claimed in the application.” (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). The scope of the claimed invention must be

clearly determined by giving the claims the “broadest reasonable interpretation consistent with the specification.” (See *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005) and MPEP § 2111.). In addition, the Guidelines state that any “**obviousness rejection should include**, either explicitly or implicitly in view of the prior art applied, **an indication of the level of ordinary skill.**” (Notice, 72 Fed. Reg. 57528 (Oct. 10, 2007)). With respect to the subject Application, the Office Action has not provided **an indication of the level of ordinary skill.**

The Guidelines still further provide that once the *Graham* factual inquiries are resolved, Office personnel must determine whether the claimed invention would have been obvious to one of ordinary skill in the art. (*Id.*). For example, the Guidelines state that **Office personnel must explain why the difference(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art.** (*Id.*). In addition, the Guidelines state that the proper analysis is **whether the claimed invention would have been obvious to one of ordinary skill in the art after consideration of all the facts.** (*Id.* and See 35 U.S.C. 103(a)).

With respect to the subject Application, the Office Action has not expressly resolved any of the *Graham* factual inquiries to determine whether the Applicants invention would have been obvious to one of ordinary skill in the art. In addition, the Office Action fails to **explain whatsoever why the difference(s) between the proposed combination of Jameson and Christensen, either individually or in combination and the Applicants claimed invention would have been obvious to one of ordinary skill in the art.** The Office Action is completely silent as to **why** “it would have been obvious” to modify *Jameson*. (8 January 2008 Final Office Action, Page 6) The Applicants respectfully disagree and further respectfully request clarification as to **why the difference(s) between the proposed combination of Jameson, Christensen, Chopra, and the Applicants claimed invention would have been obvious to one of ordinary skill in the art.** The Applicants further respectfully submit that the Examiner is using the subject Application as a template to formulate reconstructive hindsight, which constitutes impermissible use of hindsight under 35 U.S.C. § 103(a).

The Guidelines yet further state that the “key to supporting any rejection under 35 U.S.C. 103 is the **clear articulation of the reason(s) why the claimed invention would have been obvious.**” (Notice, 72 Fed. Reg. 57528 (Oct. 10, 2007)). In fact, the Supreme Court in *KSR* noted that “**the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.**” (*id.*). The Court quoting *In re Kahn* (441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)), stated that “[R]ejections on **obviousness cannot be sustained by mere conclusory statements**; instead, there **must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.**” (*KSR*, 550 U.S. at ___, 82 USPQ2d at 1396). The Guidelines provide the following seven rationales:

- (A) Combining prior art elements according to known methods to yield predictable results;
- (B) Simple substitution of one known element for another to obtain predictable results;
- (C) Use of known technique to improve similar devices (methods, or products) in the same way;
- (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;
- (E) “Obvious to try”—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;
- (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art;
- (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

The Applicants respectfully submit that the **Office Action fails to provide any articulation, let alone, clear articulation of the reasons why the Applicants claimed invention would have been obvious.** For example, the **Examiner has not adequately supported the selection and combination of Jameson, Christensen, and Chopra to render obvious the Applicants claimed invention.** The Examiner’s unsupported conclusory statements **do not adequately provide clear articulation of the reasons why the Applicants claimed invention would have been obvious.** (8 January 2008 Final Office Action, Page 6). In addition, the Examiner’s unsupported conclusory

statement fails to meet any of the Guidelines' rationales to render obvious the Applicants claimed invention. Thus, if the Examiner continues to maintain the obviousness rejection of Claims 1-7, 9-16, 18-25 and 27 based on the proposed combination of *Jameson and Christensen*, and the rejection of Claims 28-20 based upon the proposed combination of *Jameson, Christensen, and Chopra*, the Applicants respectfully request that the Examiner provide proper support for the obviousness rejection under 35 U.S.C. 103 as necessitated by the Guidelines.

The Office Action Fails to Properly Establish a *Prima Facie* case of Obvious over the Proposed *Jameson-Christensen-Official-Notice* Combination

In the Advisory Action, the Examiner states:

Examiner explicitly rejected the claims using the TSM [teaching, suggestion, or motivation] test. Examiner clearly showed evidence a teaching, suggestion or motivation. Examiner provided Applicants with an advantage of combining the references.

(21 March 2008 Advisory Action, Page 2). The Applicants respectfully disagree and respectfully submit that the Office Action has not shown the required teaching, suggestion, or motivation in these references or in knowledge generally available to those of ordinary skill in the art at the time of the invention to combine *Jameson, Christensen*, or the Examiner's Official Notice as proposed. The Office Action merely states that "it would have been obvious, at the time of the invention, for one of ordinary skill in the art to use the Jameson resource allocation method for solving supply chain problems". The Applicants respectfully disagree.

The Applicants further respectfully submit that this purported advantage relied on by the Examiner is nowhere disclosed, taught, or suggested in *Jameson* or the Examiner's Official Notice, either individually or in combination. The Examiner asserts that the motivation to combine the references as proposed would be because "**resource allocation is part of supply chain management.**" (26 July 2007 Office Action, Page 6). As discussed at length above, the Applicants respectfully disagree and further respectfully request clarification as to how the Examiner arrived at this conclusion.

In particular, the Applicants respectfully request clarification as to how the Examiner arrived at the conclusion that “a resource allocation problem is a supply chain planning problem.” (8 January 2008 Final Office Action, Page 6). As another example, to what extent does the Examiner purport that “solving a resource allocation problem” applies to the subject Application. The Applicants respectfully request the Examiner to point to the portions of *Jameson* or the Examiner’s Official Notice which contain the teaching, suggestion, or motivation to combine these references for the for the Examiner’s stated purported advantage. In particular, the Applicants respectfully request the Examiner to point to the portions of *Jameson* or the Examiner’s Official Notice which expressly state that “**resource allocation is part of supply chain management**”.

The Applicants Claims are Patentable over the proposed *Jameson/Christensen* Combination

The Applicants respectfully submit that amended independent Claim 1 is considered patentably distinguishable over *Jameson* and *Christensen*. This being the case, amended independent Claims 9, 10, 18, 19, and 27 are also considered patentably distinguishable over *Jameson* and *Christensen*, for at least the reasons discussed above in connection with amended independent Claim 1.

Furthermore, with respect to dependent Claims 2-7, 11-16, 20-25, and 28-30: Claims 2-7 and 28 depend from amended independent Claim 1; Claims 11-16 and 29 depend from amended independent Claim 10; and Claims 20-25 and 30 depend from amended independent Claim 19. As mentioned above, each of amended independent Claims 1, 9, 10, 18, 19, and 27 are considered patentably distinguishable over *Jameson*. Thus, dependent Claims 2-7, 11-16, 20-25, and 28-30 are considered to be in condition for allowance for at least the reason of depending from an allowable claim.

For at least the reasons set forth herein, the Applicants respectfully submit that Claims 1-7, 9-16, 18-25, and 27-30 are not rendered obvious by *Jameson* and *Christensen*. The Applicants further respectfully submit that Claims 1-7, 9-16, 18-25, and 27-30 are in condition for allowance. Thus, the Applicants respectfully request that the

rejection of Claims 1-7, 9-16, 18-25, and 27-30 under 35 U.S.C. § 103(a) be reconsidered and that Claims 1-7, 9-16, 18-25, and 27-30 be allowed.

CONCLUSION:

In view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and early reconsideration and a Notice of Allowance are earnestly solicited.

A Request for Continued Examination (RCE) is being filed electronically herewith to facilitate the processing of this deposit account authorization. **The Director is hereby authorized to charge the \$810.00 RCE fee to Deposit Account No. 500777.** Although the Applicants believe no additional fees are deemed to be necessary; the undersigned hereby authorizes the Director to charge any additional fees which may be required, or credit any overpayments, to **Deposit Account No. 500777.** If an extension of time is necessary for allowing this Response to be timely filed, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) to the extent necessary. Any fee required for such Petition for Extension of Time should be charged to **Deposit Account No. 500777.**

Please link this application to Customer No. 53184 so that its status may be checked via the PAIR System.

Respectfully submitted,

7 April 2008
Date

/Steven J. Laureanti/signed
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